



Stony Brook University

# The RHIC / AGS User Meeting at DNP

Nils Feege

Joint fsPhenix / EIC

Detector Simulation Meeting

November 3 2015

Where

Santa Fe, New Mexico

Convention Center

Sweeney D

## RHIC & AGS Users' Group Open Forum Meeting

TIME

6:30 p.m. - \*Reception

7:00 p.m. - Presentations

DATE

Thursday, October 29, 2015

AGENDA

## Beyond BESII and Jet/Upsilon Physics

### Guest Speakers

Renee Fatemi, University of Kentucky

Nils Feege, Stony Brook University

Krishna Rajagopal, Massachusetts Institute of Technology

Bjoern Schenke, Brookhaven National Laboratory

Zhangbu Xu, Brookhaven National Laboratory

\*Light dinner will be served, courtesy of Brookhaven Science Associates

Contact: Lijuan Ruan, RHIC/AGS Users Executive Committee—[ruan@bnl.gov](mailto:ruan@bnl.gov)

# NSAC long-range plan report

## Krishna Rajagopal

"The upgraded RHIC facility provides unique capabilities that must be utilized to explore the **properties and phases of quark and gluon matter** in the highest temperatures of the early universe and to explore the **spin structure of the proton.**"

"We recommend a high-energy high-luminosity polarized **EIC** as the **highest priority** for new facility construction following the completion of FRIB."

**NSAC long-range plan report**

Krishna Rajagopal

**sPHENIX physics beyond Jet/Upsilon**

Nils Feege

**STAR physics beyond BESII**

Zhangbu Xu

**Future RHIC Spin and cold QCD**

**Program**

Renee Fetami

**Forward heavy ion measurements to  
constrain 3+1D hydro**

Björn Schenke

# Performance of the sPHENIX-based EIC detector for 20 GeV electrons?

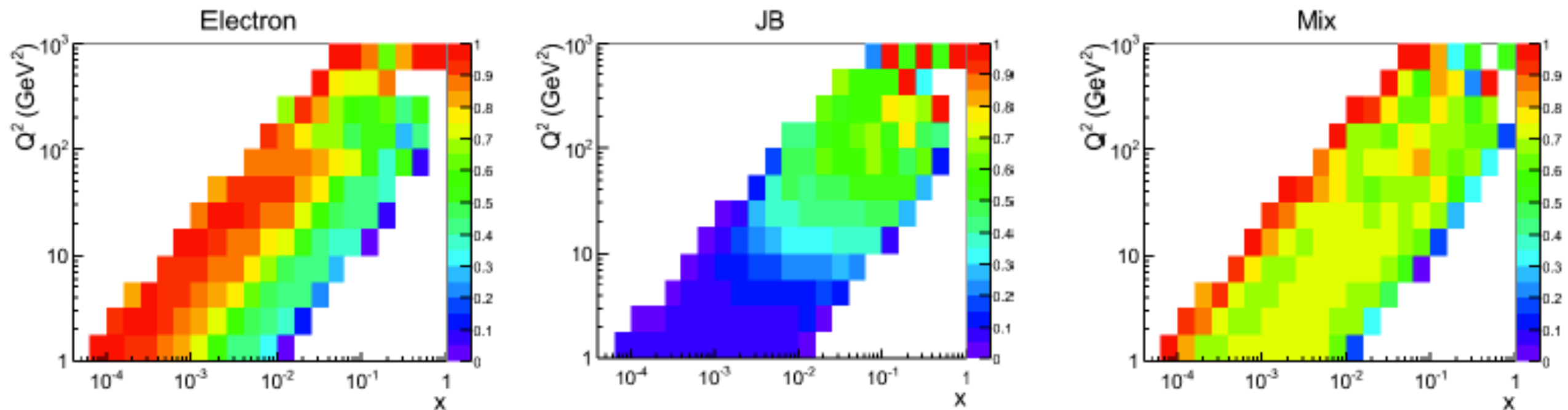


Figure 4-19: For 15 GeV  $\times$  250 GeV beam energy configuration, event purity in  $(x, Q^2)$  bins, defined by the likelihood of an event to remain in its true  $(x, Q^2)$  bin after resolutions smearing; left – for electron method, middle – for Jacquet-Blondel method, and right – for “Mixed” method, when  $Q^2$  is defined from electron method,  $y$  is defined from Jacquet-Blondel method, and  $x = Q^2/(sy)$ .

eRHIC CDR (arXiv1409.1633)